REMARKS

The Examiner is thanked for the thorough examination of the present application. The Examiner is also thanked for the telephonic interview of October 8, 2009, during which the current claim rejections were discussed. To advance prosecution, independent Claims 1, 23, and 27 have been amended to include subject matter from dependent Claims 4, 26, and 30, respectively. No new matter has been added and no new issues are raised by this amendment. Accordingly, entry and favorable consideration of these amendments are respectfully requested. The patentability of the amended claims is discussed in detail below.

I. The Claimed Invention

As recited in amended independent Claim 1, for example, the cryptographic device includes a cryptographic module and a communications module removably coupled thereto. More particularly, the cryptographic module includes a first housing, a user network interface carried by the first housing, a cryptographic processor carried by the first housing and coupled to the user network interface, and a first connector carried by the first housing and coupled to the cryptographic processor. The communications module includes a second housing, a second connector carried by the second housing and removably mateable with the first connector of the cryptographic module, a

network interface carried by the second housing and coupled to the second connector, and at least one logic device being polled by the cryptographic processor to determine a type of communications module and an operating status of the communications module. The at least one logic device also permits the cryptographic processor to configure the network communications interface of the communications module for a given application.

Independent Claim 13 is directed to a related cryptographic device and further recites the user Local Area Network (LAN) interface that includes a plurality of different connectors for coupling the cryptographic module to different network devices. Amended independent Claim 23 is directed to a related communications method, and amended independent Claim 27 is directed to a related communications system. Independent Claims 23 and 27 have been similar to amended independent Claim 1.

II. The Claims Are Patentable

The Examiner rejected independent Claims 13 and previous dependent Claims 4, 26, and 30 over Dhir et al. in view of Cheng in further view of Allmond et al. Dhir et al. is directed to a programmable integrated circuit, namely a field programmable gate array (FPGA), that can be used to handle different wireless local area network (WLAN) communication specifications. The integrated circuit includes a transceiver

coupled to programmable gates, a memory coupled to the programmable gates for storing instructions for programming a first portion of the programmable gates with a selected one of a first type of a medium access layer and a second type of a medium access layer. The first type of the medium access layer is different from the second type of medium access layer, though both the first type of the medium access layer and the second type of the media access layer are compatible with the transceiver.

The Examiner correctly recognized that Dhir et al. fails to teach a cryptographic module and a communications module that are removably coupled to one another, and at least one logic device being polled by the cryptographic processor to determine a type of communications module and an operating status of the communications module. The Examiner turned to Cheng to provide some of these critical deficiencies. More particularly, the Examiner contended that Cheng discloses a cryptographic module and a communications module that are removably coupled to one another. Cheng is directed to an add-on card for a computer that is detachable from the computer and allows the computer to communicate with both wired and wireless networks. The add-on card includes an access control circuit, volatile and non-volatile memory, a wireless transmission module, and a network connection module. The network connection module has both an antenna for communicating with a wireless

network, and a standard network cable port for connecting to a wired network.

The Examiner further correctly recognized that even a selective combination of Dhir et al. and Cheng fails to disclose at least one logic device being polled by the cryptographic processor to determine a type of communications module and an operating status of the communications module. The Examiner turned to Allmond et al. for these critical deficiencies.

Allmond et al. is directed to an automatic communications protocol detection system. More particularly, Allmond et al. discloses a network for interconnecting a plurality of data devices. Data devices include any source or destination of data to the network, including a computer, workstation, file server, hub, NIC, concentrator, modem, printer, or other device that can receive or transmit data in the network. The network also includes an adaptive repeater. The data devices may be coupled to the repeater via connectors, which may be RJ-45, FDDI, BNC, and SMA connectors, for example.

Independent Claims 1, 23, and 27 have been amended to recite the at least one logic device also permitting the cryptographic processor to configure the network communications interface of the communications module for a given application. The Examiner contended that Dhir et al., abstract, lines 1-8 and Col. 3, lines 1-17, disclose the at least one logic device also permitting the cryptographic processor to configure the network communications interface of the communications module.

> Another aspect of the present invention is a method for providing a multi-platform wireless local area network. More particularly, a radio is provided along with programmable input/output blocks coupled thereto. Configuration logic blocks coupled to the programmable input/output blocks are provided. A plurality of medium access control layers compatible with the radio and configured to program the configuration logic blocks are stored. A first portion of the configuration logic blocks is selectively programmed with a medium access control layer from the plurality of medium access control layers. Another aspect of the present invention is the above method further comprising storing a plurality of encryption algorithms configured to program the configuration logic blocks, and selectively programming a second portion of a configuration logic blocks with an encryption algorithm selected from the plurality of encryption algorithms.

Applicants submit that even a selective combination of the prior art fails to disclose the at least one logic device also permitting the cryptographic processor to configure the network LAN interface, as recited in independent Claim 13, and the at least one logic device also permitting the cryptographic processor to configure the network interface for a given application, as recited in amended independent Claims 1, 23, and 27. Instead, programmable input/output blocks are provided with a radio and have configuration logic blocks coupled thereto.

The configuration logic blocks are selectively programmed with a medium access control layer. (See Dhir et al., Col. 3, lines 1-17). Moreover, programmable logic fabric 120 of Dhir et al. includes fixed logic components embedded therein allowing high speed data processing. (See Dhir et al., Col. 4, line 67- Col. 5, line 2). Still further, the wireless local area network transceiver 301, which the Examiner contended corresponds to the claimed network LAN interface, merely receives information from or provides information to antenna 336. (See Dhir et al., Col. 8, lines 23-30). In other words, there is nothing in Dhir et al. that discloses the cryptographic processor being permitted to configure the network LAN interface. Indeed, nowhere in Dhir et al. does it disclose the at least one logic device also permitting the cryptographic processor to configure the network interface for a given application, as recited in amended independent Claims 1, 23, and 27, or the network LAN interface, as recited in independent Claim 13. Cheng similarly fails to disclose the at least one logic device also permitting the cryptographic processor to configure the network interface for a given application, as recited in amended independent Claims 1, 23, and 27, or the network LAN interface, as recited in independent Claim 13.

Additionally, the Examiner referred to Allmond et al., Col. 4, lines 31-34, which disclose, "Control logic is provided for receiving and monitoring the link signals, where the control logic enables one of the plurality of transceivers within each

of the plurality of interface circuits corresponding to the detected network device." The Examiner contended that Col. 4, lines 31-34, somehow corresponds to configuring the network communication interface, as recited in amended independent Claims 1, 23, and 27, or the network LAN interface, as recited in independent Claim 13. Indeed, Allmond et al. merely discloses control logic turning on and off transceivers based upon a detected network device. Accordingly, even a selective combination of the prior art fails to disclose the claimed invention, as recited in independent Claim 13, and the at least one logic device also permitting the cryptographic processor to configure the network LAN interface for a given application, as recited in amended independent Claims 1, 23, and 27.

Applicants further submit that the Examiner's combination of Dhir et al., Cheng, and Allmond et al. is improper, as a person having ordinary skill in the art would not turn to Cheng and Allmond et al. to combine with Dhir et al. in an attempt to arrive at the claimed invention. More particularly, Dhir et al. is directed to a programmable logic device for a WLAN. The communications module and the cryptographic module are purposely on a single circuit board (330), as illustrated in Fig. 8 of Dhir et al. Combining Dhir et al. with Cheng so that the communications module and the cryptographic module would be removably coupled would require splitting the communications and cryptographic modules from the single circuit board.

The Examiner referred to Figure 7 and Col. 7, lines 48-56, of Dhir et al. to support his selective combination of Dhir et al. and Cheng. Dhir et al., Col. 7, lines 48-56, are reproduced below for reference.

> Referring to FIG. 7, there is shown an exemplary embodiment of FPGA 300 program in accordance with one or more aspects of the present invention. In this embodiment, a separate transceiver 301 integrated circuit, namely not embedded in FPGA 300, is coupled to FPGA 300, as is program memory 312. In this embodiment, a direct interface between separate transceiver 301 and FPGA 300 may be employed for direct interaction between transceiver 301 and FPGA 300.

The Examiner contended that Dhir et al. discloses that the transceiver 301 is separable from the FPGA 300. However, Dhir et al. discloses that while the FPGA may be separate from the transceiver 301, they are carried by a single circuit board 330. (See Dhir et al. Figure 8).

The Examiner also noted that Dhir et al. does not specifically mention that the communication module is removable from the cryptographic module, and turned to Cheng to show a detachable module. Applicants submit that using Cheng as a motivation to modify Dhir et al. would result in arbitrarily dividing the circuitry of Dhir et al. between the antenna 336 and the WLAN transceiver 301, the antenna being outside the circuit board and downstream from both the communications and

cryptographic modules. This is because Cheng discloses removably coupling the communications modules to a connector portion, including a physical connector and antenna. Accordingly, even if there was some proper motivation to combine Dhir et al. and Cheng, the claimed invention is not produced because the removable coupling, for example, as described in Cheng, is not between the communications module and the cryptographic module.

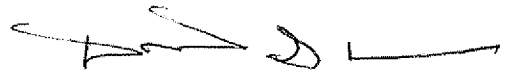
Still further, one of ordinary skill in the art would not turn to the communication protocol detection system of Allmond et al. to combine with the programmable integrated circuit from Dhir et al. and the add-on card for a computer that is detachable from the computer and allows the computer to communicate with both wired and wireless networks from Cheng. In other words, the Examiner is attempting to combine an FPGA for a wireless LAN, with a PCMCIA network add-on card, and a network interface card. Applicants submit that the Examiner is merely combining disjoint pieces of the prior art in an attempt to arrive at the claimed invention. Accordingly, it is submitted that the Examiner's combination of references is improper.

Accordingly, it is submitted that amended independent Claims 1, 23 and 27, and independent Claim 13 are patentable over the prior art. Their respective dependent claims, which recite yet further distinguishing features, are also patentable over the prior art and require no further discussion herein.

III. CONCLUSION

In view of the arguments and amendments provided herein, it is submitted that all the claims are patentable. Accordingly, a Notice of Allowance is requested in due course. Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,



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